

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019753**Date Inspected:** 18-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Qiu Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 13AW (NWIT # 7824)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3013Y-133, 137, 068, 070, 049, 051, 058

SEG3013H-139, 140

SEG3013J-127, 128

SEG3013AU-105

SEG3013AV-094

BAY 14, OBG 13AW (NWIT # 7833)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The

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members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3013X-507 to 510

SEG3013X-555, 556, 383, 384, 389, 390, 395, 396

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 13AW:

Repair welding of weld joint no: SEG3013P-333 [Floor Beam (FB) to Sub Assembly Plate, complete joint penetration (CJP) weld at panel point (PP) 119]. The welder is identified as 045221 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Sun Tian Ling. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS): 345-SMAW-3G(3F)-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 19192 Rev-0.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3013AA-053 [Edge Plate (EP) 3020A to Floor Beam (FB) 3193A, CJP weld; at PP119 + 1500]. The welder is identified as 066421 and was observed welding in the 3G position. ZPMC QC was identified as Sun Tian ling. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The FCAW process on weld joint no: SEG3013AA-005 (EP3020A to FB3178A, CJP weld; at PP118). The welder is identified as 045280 and was observed welding in the 3G position. ZPMC QC was identified as Sun Tian ling. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The SMAW process on weld joint no: SEG3013Y-357 [I-rib stiffener of SA3167A to FB, CJP weld; at PP119). The welder is identified as 066363 and was observed welding in the 4G position. ZPMC QC was identified as Sun Tian ling. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-TC-U4b-FCM-1.

OBG Seg 14W

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AY-014 [Bottom Plate (BP) 3088 to Side Plate (SP) 3132A, CJP weld]. The welder is identified as 202122 and was observed welding in the 1G position. ZPMC QC was identified as Mr. Qiu Wen. The welding variables recorded by QC appeared to comply with WPS: B-T-2231-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AY-015 [Bottom Plate (BP) 3088 to Side Plate (SP) 3134A, CJP weld]. The welder is identified as 045175 and was observed welding in the 1G position. ZPMC QC was identified as Mr. Qiu Wen. The welding variables recorded by QC appeared to comply with WPS: B-T-2231-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gaikwad,Umesh	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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